

Amendments to the Claims

Please replace the current claim listing with the following claim listing:

1. (currently amended) An oligomeric MHC complex comprising at least three ~~two~~ chimeric proteins, said chimeric proteins each comprising a first section derived from an MHC peptide chain or a functional part thereof and a second section comprising an oligomerising domain derived from an oligomer-forming coiled-coil protein, wherein formation of the oligomeric MHC complex occurs by oligomerisation at the oligomerising domain of the chimeric proteins, and wherein at least three ~~two~~ of the first sections are derived from the same MHC peptide chain.
2. (original) An oligomeric MHC complex of claim 1 wherein the first section of the chimeric proteins is derived from the extra-cellular part of the MHC class I or II α chain.
3. (currently amended) An oligomeric MHC complex of claim 1 wherein the first section of the chimeric proteins is derived from the extra-cellular part of the MHC class I or II β ~~[[α]]~~ chain.
4. (currently amended) An oligomeric MHC complex of claim 1 wherein the oligomer-forming coil-coiled protein is oligomerising domain comprised in the second section in at least one of the ~~chimeric proteins is derived from the pentamerisation domain of the cartilage oligomeric matrix protein (COMP).~~
5. (currently amended) An oligomeric MHC complex of claim 4 wherein the oligomerising domain comprises amino acids 20-72 of COMP. ~~pentamerisation domain of COMP comprised in the second section in at least one of the chimeric proteins comprises the amino acid sequence of the first fifty-three amino acids of SEQ ID NO. 22.~~
6. (currently amended) An oligomeric MHC complex of claim 1 wherein at least one of the chimeric proteins further comprises a first linker between the MHC peptide chain and the oligomerising do[[-]]main.

7. (original) An oligomeric MHC complex of claim 1 wherein at least one of the chimeric proteins further comprises one or more domains selected from the group consisting of a second linker, a tagging domain and a purification domain.
8. (currently amended) An oligomeric MHC complex according to claim 1 further comprising the complementary MHC peptide chains to at least two of the chimeric proteins to form functional MHC binding complexes.
9. (original) An oligomeric MHC complex according to claim 8 further comprising peptide bound to the MHC portions of the complex in the groove formed by the MHC $\alpha 1$ and $\alpha 2$ domains for class I complexes or the MHC $\alpha 1$ and $\beta 1$ domains for class II complexes.
10. (currently amended) An oligomeric MHC complex according to claim 9 wherein the peptide is substantially homogeneous.
11. (original) An oligomeric MHC complex according to claim 1 comprising a label.
12. (original) An oligomeric MHC complex according to claim 11 wherein the label is selected from the group consisting of a light detectable label, a radioactive label, an enzyme, an epitope, a lectin, or biotin.
13. (withdrawn) A chimeric protein comprising a first section derived from an MHC peptide chain or a functional part thereof and a second section comprising an oligomerising domain derived from an oligomer-forming coiled-coil protein which coiled-coil protein oligomerises by alignment of at least two substantially identical versions of the polypeptide chain from which the oligomerising domain is derived.
14. (withdrawn) A chimeric protein according to claim 13 comprising an oligomerising domain derived from the pentamerisation domain of the human cartilage oligomeric matrix protein (COMP).

15. (withdrawn) A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 20 to 72 of COMP.

16. (withdrawn) A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 20 to 83 of COMP.

17. (withdrawn) A chimeric protein according to claim 14 wherein the oligomerising domain comprises the amino acids 1 to 128 of COMP.

18. (withdrawn) A recombinant expression cassette comprising a promoter sequence operably linked to a nucleotide sequence coding for a chimeric protein as defined in claim 13.

19. (withdrawn) A vector comprising the recombinant expression cassette of claim 18.

20. (original) A pharmaceutical or diagnostic composition, comprising an oligomeric MHC complex according to any one of claims 1 to 12, optionally in combination with a pharmaceutically acceptable carrier.

21. (withdrawn) A method of labeling and or detecting mammalian T cells according to the specificity of their antigen receptor, the method comprising

(iii) combining an oligomeric MHC complex according to any one of claims 1 to 12 and a suspension or biological sample comprising T cells, and

(iv) detecting the presence of specific binding of said complex and the T cells.

22. (withdrawn) A method of separating mammalian T cells according to the specificity of their antigen receptor, the method comprising

(iii) combining an oligomeric MHC complex according to any one of claims 1 to 12 and a suspension or biological sample comprising T cells, and

(iv) separating T cells bound to said complex from unbound cells.

23. (withdrawn) A primer consisting of a DNA sequence selected from the group consisting of BMC #1 [Seq ID No. 2], BMC #2 [Seq ID No. 3], BMC #3 [Seq ID No. 8], BMC #4 [Seq ID No. 9], BMC #5 [Seq ID No. 10], BMC #6 [Seq ID No. 11], BMC #7 [Seq ID No. 12], BMC #8 [Seq ID No. 13], BMC #9 [Seq ID No. 14], BMC #10 [Seq ID No. 15], BMC #11 [Seq ID No. 18], BMC #12 [Seq ID No. 19], A2S #1 [Seq ID No. 20], and A2S #2 [Seq ID No. 21].

24. (currently amended) An oligomeric MHC complex of claim 4 wherein the ~~pentamerisation domain of COMP comprised in the second section in at least one of the chimeric proteins~~ oligomerising domain comprises the amino acids 21 to 85 of SEQ ID NO: 23.

25. (canceled)

26. (currently amended) An oligomeric MHC complex of claim 4 wherein the oligomerising domain ~~comprised in the second section in at least one of the chimeric proteins~~ comprises the amino acid sequence of SEQ ID NO. 22.

27. (currently amended) An oligomeric MHC complex of claim 1 wherein the oligomer forming coil-coiled protein is oligomerising domain ~~comprised in the second section in at least one of the chimeric proteins is derived from the pentamerisation domain of the human cartilage oligomeric matrix protein (COMP).~~

28. (new) An oligomeric MHC complex of claim 1, wherein the complex comprises three chimeric proteins.

29. (new) An oligomeric MHC complex of claim 1, wherein the complex comprises five chimeric proteins.